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Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person or persons having title to this patent the right to exclude others from making, using or selling the invention throughout the United States of America for the term of seventeen years from the date of this patent, subject to the payment of maintenance fees as provided by law.

Michael K. Kirk

Acting Commissioner of Patents and Trademarks

Marcia L. Campbell

Attest

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United States Patent [19]

Dickinson et al.

[11] Patent Number: 5,207,224
[45] Date of Patent: May 4, 1993

[54] MAGNETIC RESONANCE APPARATUS

[75] Inventors: Robert J. Dickinson, Wealdstone; Christopher P. Randell, Uxbridge, both of England

[73] Assignee: Picker International, Ltd., Wembley, United Kingdom

[21] Appl. No.: 855,116

[22] Filed: Mar. 18, 1992

Related U.S. Application Data

[63] Continuation of Ser. No. 441,637, Nov. 27, 1989, abandoned.

[30] Foreign Application Priority Data

Dec. 9, 1988 [GB] United Kingdom 8828810

[51] Int. Cl. 5/055

[52] U.S. Cl. 128/653.5; 324/318; 5/601

[58] Field of Search 128/653.2, 653.5; 324/309, 318, 322; 378/208, 209; 5/601, 600, 611

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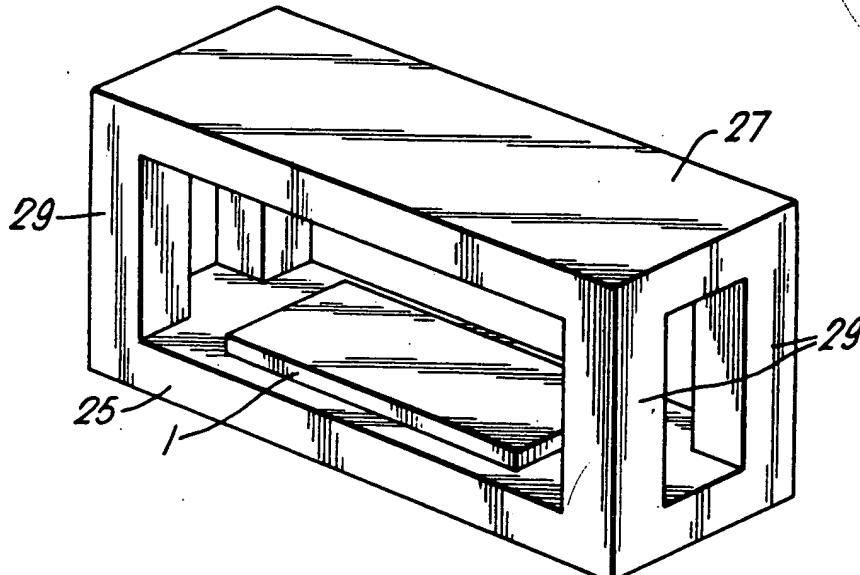
JP-A-61 114 148 (Sumitomo Special Metals Co., Ltd.)
May 31, 1986.

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Assistant Examiner—K. M. Pfaffle
Attorney, Agent, or Firm—Timothy B. Gurin

[57] ABSTRACT

A magnetic resonance imaging apparatus using a transverse magnet system (29) and having a patient handling arrangement (31, 33) which allows transport of a patient into the magnet system by first moving the patient in a direction (A) at right angles to the head-to-toe axis (B) of the patient. The patient's position in the magnet system may then be adjusted by movement in the head-to-toe axis direction. The area required to accommodate the apparatus is reduced compared with apparatus wherein patient transport is effected solely in the patient's head-to-toe axis direction.

13 Claims, 4 Drawing Sheets



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'2, 1980, maintenance fees and eleven years and six months thereafter upon payment, and timing of the payment. Unless payment of the Patent Office on or before the date the patent will expire as of